

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
15 September 2005 (15.09.2005)

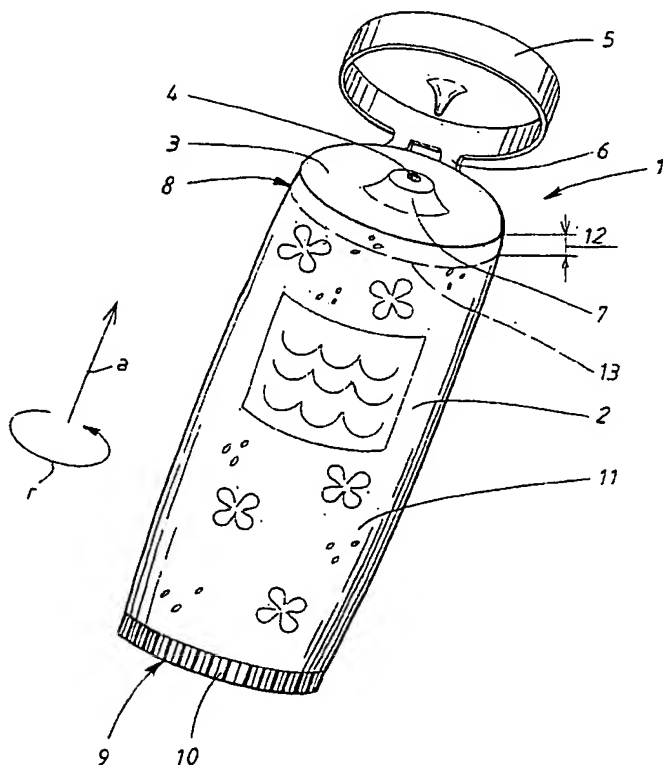
PCT

(10) International Publication Number  
**WO 2005/085081 A1**

- (51) International Patent Classification<sup>7</sup>: **B65D 35/02, B29C 45/14**
- (21) International Application Number: **PCT/IB2005/000983**
- (22) International Filing Date: **2 March 2005 (02.03.2005)**
- (25) Filing Language: **Swedish**
- (26) Publication Language: **English**
- (30) Priority Data:  
**0400518-7 3 March 2004 (03.03.2004) SE**
- (71) Applicant (for all designated States except US): **NORDEN TUBES AB [SE/SE]; Bangatan 9, S-265 38 Åstorp (SE).**
- (72) Inventor; and
- (75) Inventor/Applicant (for US only): **JÖNSSON, Sven-Åke [SE/SE]; Mosselundsgår. 27, S-331 33 Värnamo (SE).**
- (74) Agent: **ALBIHNS GÖTEBORG AB; Box 142, S-401 22 Göteborg (SE).**
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): **ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,**

[Continued on next page]

(54) Title: **THIN-WALLED PLASTIC TUBE WITH LABEL**



(57) Abstract: A thin-walled plastic tube (1) having an axial direction (a) and a radial direction (r), the plastic tube (1) being manufactured by injection moulding and comprising a tube body (2) with a tube shoulder with an emptying opening (4) at a first end (8) and an end closure (10) at a second end (9), the tube body (2) having a wall thickness of 0.3-1.2 mm. The plastic tube (1) comprises a label (11) applied simultaneously with the injection moulding, the label (11) comprising a plastic film with a tensile strength in the axial direction (a) of the tube (1) which is at least 100 N/mm<sup>2</sup>, preferably at least 150 N/mm<sup>2</sup>, and most preferably at least 210 N/mm<sup>2</sup> measured according to DIN ISO 527-1/-3, an elongation at break which is at most 70%, preferably at most 50%, and most preferably at most 25% measured according to DIN ISO 527-1/-3, and a thickness of at most 90 µm and preferably of at most 75 µm.



SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

**Published:**

- *with international search report*
- *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*